



BARGE "HFL 431"

INNAGE TRIM TABLE

	1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.	
	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN	BOW	STERN
1 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
1 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
2 PORT	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
2 STBD	- 00-0/8	00-0/8	- 00-0/8	00-0/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8	- 00-1/8	00-1/8
3 PORT	- 00-3/8	00-3/8	- 00-3/4	00-3/4	- 01-0/8	01-0/8	- 01-3/8	01-3/8	- 01-3/4	01-3/4	- 02-1/8	02-1/8
3 STBD	- 00-3/8	00-3/8	- 00-3/4	00-3/4	- 01-0/8	01-0/8	- 01-3/8	01-3/8	- 01-3/4	01-3/4	- 02-1/8	02-1/8

(ALL MEASUREMENTS ABOVE ARE IN INCHES)

EXAMPLE FOR ABOVE TRIM CORRECTIONS:

FWD. DRAFT	=	1'-00"
AFT DRAFT	=	4'-00"
DIFF.	=	3'-00" (DOWN BY STERN)

THE CORRECTION FOR 3'-00" TRIM DOWN BY STERN FOR 3 PORT IS 01-0/8"
FOR A MEASURED INNAGE GAUGE OF 4'-00" ON 3 PORT, THE TRIM CORRECTED INNAGE IS 4'-01"

LENGTH BETWEEN DRAFT MARKS: 241'-03"

March 5, 2015

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588

<http://www.pmacorp.net>



MANAGE YOUR TANK

FOR

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-06 1/4"

	0 FT.	1 FT.	2 FT.	3 FT.	4 FT.	5 FT.	6 FT.	7 FT.	8 FT.	9 FT.
0	855	11,838	24,530	38,624	53,507	68,401	83,295	98,189	113,082	127,976
1/4	1,023	12,089	24,811	38,933	53,817	68,711	83,605	98,499	113,393	128,286
1/2	1,190	12,339	25,092	39,242	54,128	69,022	83,915	98,809	113,703	128,597
3/4	1,358	12,589	25,373	39,551	54,438	69,332	84,226	99,119	114,013	128,907
1	1,526	12,840	25,654	39,860	54,748	69,642	84,536	99,430	114,324	129,217
1 1/4	1,745	13,093	25,937	40,169	55,059	69,952	84,846	99,740	114,634	129,528
1 1/2	1,963	13,346	26,221	40,478	55,369	70,263	85,156	100,050	114,944	129,838
3/4	2,181	13,599	26,504	40,787	55,679	70,573	85,467	100,361	115,254	130,148
2	2,400	13,851	26,788	41,096	55,989	70,883	85,777	100,671	115,565	130,458
1 1/4	2,622	14,107	27,072	41,406	56,300	71,194	86,087	100,981	115,875	130,769
1 1/2	2,845	14,362	27,357	41,716	56,610	71,504	86,398	101,291	116,185	131,079
3/4	3,068	14,618	27,641	42,026	56,920	71,814	86,708	101,602	116,496	131,389
3	3,291	14,873	27,925	42,337	57,231	72,124	87,018	101,912	116,806	131,700
1 1/4	3,517	15,131	28,212	42,647	57,541	72,435	87,328	102,222	117,116	132,010
1 1/2	3,743	15,390	28,499	42,957	57,851	72,745	87,639	102,533	117,426	132,320
3/4	3,969	15,648	28,786	43,268	58,161	73,055	87,949	102,843	117,737	132,630
4	4,196	15,906	29,073	43,578	58,472	73,366	88,259	103,153	118,047	132,941
1 1/4	4,425	16,166	29,363	43,888	58,782	73,676	88,570	103,463	118,357	133,251
1 1/2	4,654	16,427	29,652	44,198	59,092	73,986	88,880	103,774	118,668	133,561
3/4	4,884	16,687	29,942	44,509	59,403	74,296	89,190	104,084	118,978	133,872
5	5,113	16,948	30,231	44,819	59,713	74,607	89,500	104,394	119,288	134,182
1 1/4	5,346	17,211	30,523	45,129	60,023	74,917	89,811	104,705	119,598	134,492
1 1/2	5,578	17,474	30,815	45,440	60,333	75,227	90,121	105,015	119,909	134,803
3/4	5,810	17,737	31,107	45,750	60,644	75,538	90,431	105,325	120,219	135,113
6	6,043	18,001	31,399	46,060	60,954	75,848	90,742	105,635	120,529	135,423
1 1/4	6,278	18,266	31,694	46,371	61,264	76,158	91,052	105,946	120,840	135,733
1 1/2	6,513	18,532	31,988	46,681	61,575	76,468	91,362	106,256	121,150	136,044
3/4	6,748	18,798	32,283	46,991	61,885	76,779	91,673	106,566	121,460	136,354
7	6,983	19,063	32,577	47,301	62,195	77,089	91,983	106,877	121,770	136,664
1 1/4	7,221	19,331	32,875	47,612	62,505	77,399	92,293	107,187	122,081	136,975
1 1/2	7,458	19,600	33,172	47,922	62,816	77,710	92,603	107,497	122,391	137,285
3/4	7,696	19,868	33,469	48,232	63,126	78,020	92,914	107,807	122,701	137,595
8	7,934	20,136	33,766	48,543	63,436	78,330	93,224	108,118	123,012	137,905
1 1/4	8,174	20,407	34,066	48,853	63,747	78,640	93,534	108,428	123,322	138,216
1 1/2	8,414	20,678	34,365	49,163	64,057	78,951	93,845	108,738	123,632	138,526
3/4	8,654	20,949	34,665	49,473	64,367	79,261	94,155	109,049	123,942	138,836
9	8,895	21,219	34,965	49,784	64,677	79,571	94,465	109,359	124,253	139,147
1 1/4	9,137	21,493	35,267	50,094	64,988	79,882	94,775	109,669	124,563	139,457
1 1/2	9,380	21,766	35,569	50,404	65,298	80,192	95,086	109,979	124,873	139,767
3/4	9,623	22,039	35,871	50,715	65,608	80,502	95,396	110,290	125,184	140,077
10	9,866	22,313	36,174	51,025	65,919	80,812	95,706	110,600	125,494	140,388
1 1/4	10,111	22,589	36,479	51,335	66,229	81,123	96,017	110,910	125,804	140,698
1 1/2	10,356	22,864	36,784	51,645	66,539	81,433	96,327	111,221	126,114	141,008
3/4	10,601	23,140	37,089	51,956	66,849	81,743	96,637	111,531	126,425	141,319
11	10,847	23,416	37,394	52,266	67,160	82,054	96,947	111,841	126,735	141,629
1 1/4	11,095	23,695	37,701	52,576	67,470	82,364	97,258	112,152	127,045	141,939
1 1/2	11,342	23,973	38,009	52,887	67,780	82,674	97,568	112,462	127,356	142,249
3/4	11,590	24,251	38,317	53,197	68,091	82,984	97,878	112,772	127,666	142,560

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP LIP OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

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Eric J. Plante



DANGER FILL 431

1 PUK1
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-06 1/4"

	10 FT.	11 FT.	12 FT.	13 FT.	14 FT.	15 FT.	16 FT.	17 FT.	18 FT.	19 FT.
0	142,870	157,764	172,636	187,486	202,313	0	0	0	0	0
1/4	143,180	158,074	172,945	187,795	202,578	1/4	1/4	1/4	1/4	1/4
1/2	143,491	158,384	173,254	188,104	202,843	1/2	1/2	1/2	1/2	1/2
3/4	143,801	158,695	173,564	188,414	203,108	3/4	3/4	3/4	3/4	3/4
1	144,111	159,005	173,873	188,723	203,374	1	1	1	1	1
1/4	144,421	159,315	174,183	189,032	203,594	1/4	1/4	1/4	1/4	1/4
1/2	144,732	159,626	174,492	189,342	203,815	1/2	1/2	1/2	1/2	1/2
3/4	145,042	159,936	174,801	189,651	204,036	3/4	3/4	3/4	3/4	3/4
2	145,352	160,246	175,111	189,961	204,256	2	2	2	2	2
1/4	145,663	160,556	175,420	190,270	204,433	1/4	1/4	1/4	1/4	1/4
1/2	145,973	160,867	175,729	190,579	204,609	1/2	1/2	1/2	1/2	1/2
3/4	146,283	161,177	176,039	190,889	204,786	3/4	3/4	3/4	3/4	3/4
3	146,593	161,487	176,348	191,198	204,962	3	3	3	3	3
1/4	146,904	161,798	176,658	191,507	205,138	1/4	1/4	1/4	1/4	1/4
1/2	147,214	162,108	176,967	191,817	205,315	1/2	1/2	1/2	1/2	1/2
3/4	147,524	162,418	177,276	192,126	205,491	3/4	3/4	3/4	3/4	3/4
4	147,835	162,728	177,586	192,436	205,667	4	4	4	4	4
1/4	148,145	163,039	177,895	192,745	205,843	1/4	1/4	1/4	1/4	1/4
1/2	148,455	163,349	178,204	193,054	206,019	1/2	1/2	1/2	1/2	1/2
3/4	148,765	163,659	178,514	193,364	206,195	3/4	3/4	3/4	3/4	3/4
5	149,076	163,970	178,823	193,673	206,371	5	5	5	5	5
1/4	149,386	164,280	179,133	193,982	206,547	1/4	1/4	1/4	1/4	1/4
1/2	149,696	164,590	179,442	194,292	206,723	1/2	1/2	1/2	1/2	1/2
3/4	150,007	164,900	179,751	194,601	206,899	3/4	3/4	3/4	3/4	3/4
6	150,317	165,211	180,061	194,911	207,075	6	6	6	6	6
1/4	150,627	165,520	180,370	195,220	207,251	1/4	1/4	1/4	1/4	1/4
1/2	150,937	165,829	180,679	195,529	207,427	1/2	1/2	1/2	1/2	1/2
3/4	151,248	166,139	180,989	195,839	207,603	3/4	3/4	3/4	3/4	3/4
7	151,558	166,448	181,298	196,148	207,779	7	7	7	7	7
1/4	151,868	166,758	181,607	196,457	207,955	1/4	1/4	1/4	1/4	1/4
1/2	152,179	167,067	181,917	196,767	208,131	1/2	1/2	1/2	1/2	1/2
3/4	152,489	167,376	182,226	197,076	208,307	3/4	3/4	3/4	3/4	3/4
8	152,799	167,686	182,536	197,386	208,483	8	8	8	8	8
1/4	153,109	167,995	182,845	197,695	208,659	1/4	1/4	1/4	1/4	1/4
1/2	153,420	168,304	183,154	198,004	208,835	1/2	1/2	1/2	1/2	1/2
3/4	153,730	168,614	183,464	198,314	209,011	3/4	3/4	3/4	3/4	3/4
9	154,040	168,923	183,773	198,623	209,187	9	9	9	9	9
1/4	154,351	169,233	184,082	198,932	209,363	1/4	1/4	1/4	1/4	1/4
1/2	154,661	169,542	184,392	199,242	209,539	1/2	1/2	1/2	1/2	1/2
3/4	154,971	169,851	184,701	199,551	209,715	3/4	3/4	3/4	3/4	3/4
10	155,281	170,161	185,011	199,861	209,891	10	10	10	10	10
1/4	155,592	170,470	185,320	200,170	210,067	1/4	1/4	1/4	1/4	1/4
1/2	155,902	170,779	185,629	200,479	210,243	1/2	1/2	1/2	1/2	1/2
3/4	156,212	171,089	185,939	200,789	210,419	3/4	3/4	3/4	3/4	3/4
11	156,523	171,398	186,248	201,098	210,595	11	11	11	11	11
1/4	156,833	171,708	186,557	201,407	210,771	1/4	1/4	1/4	1/4	1/4
1/2	157,143	172,017	186,867	201,706	210,947	1/2	1/2	1/2	1/2	1/2
3/4	157,454	172,326	187,176	202,010	211,123	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/05/2015 SW
CALCULATED: 03/05/2015 CL
PRINTED: 03/05/2015 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT
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Joe J. Pearson



INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-05 3/4"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	855	0	11,841	0	24,537	0	38,690	0	53,587	0	68,485	0	83,382	0	98,280	0	113,177	0	128,075
1/4	1,023	1/4	12,092	1/4	24,818	1/4	39,000	1/4	53,898	1/4	68,795	1/4	83,693	1/4	98,590	1/4	113,488	1/4	128,385
1/2	1,191	1/2	12,342	1/2	25,099	1/2	39,311	1/2	54,208	1/2	69,106	1/2	84,003	1/2	98,901	1/2	113,798	1/2	128,695
3/4	1,359	3/4	12,593	3/4	25,380	3/4	39,621	3/4	54,519	3/4	69,416	3/4	84,313	3/4	99,211	3/4	114,108	3/4	129,006
1	1,527	1	12,843	1	25,661	1	39,931	1	54,829	1	69,726	1	84,624	1	99,521	1	114,419	1	129,316
1/4	1,745	1/4	13,096	1/4	25,944	1/4	40,242	1/4	55,139	1/4	70,037	1/4	84,934	1/4	99,832	1/4	114,729	1/4	129,627
1/2	1,964	1/2	13,349	1/2	26,228	1/2	40,552	1/2	55,450	1/2	70,347	1/2	85,245	1/2	100,142	1/2	115,039	1/2	129,937
3/4	2,182	3/4	13,602	3/4	26,512	3/4	40,863	3/4	55,760	3/4	70,657	3/4	85,555	3/4	100,452	3/4	115,350	3/4	130,247
2	2,400	2	13,855	2	26,795	2	41,173	2	56,070	2	70,968	2	85,865	2	100,763	2	115,660	2	130,558
1/4	2,623	1/4	14,111	1/4	27,081	1/4	41,483	1/4	56,381	1/4	71,278	1/4	86,176	1/4	101,073	1/4	115,971	1/4	130,868
1/2	2,846	1/2	14,367	1/2	27,367	1/2	41,794	1/2	56,691	1/2	71,589	1/2	86,486	1/2	101,383	1/2	116,281	1/2	131,178
3/4	3,069	3/4	14,622	3/4	27,653	3/4	42,104	3/4	57,001	3/4	71,899	3/4	86,796	3/4	101,694	3/4	116,591	3/4	131,489
3	3,291	3	14,878	3	27,939	3	42,414	3	57,312	3	72,209	3	87,107	3	102,004	3	116,902	3	131,799
1/4	3,518	1/4	15,136	1/4	28,227	1/4	42,725	1/4	57,622	1/4	72,520	1/4	87,417	1/4	102,315	1/4	117,212	1/4	132,109
1/2	3,744	1/2	15,394	1/2	28,515	1/2	43,035	1/2	57,933	1/2	72,830	1/2	87,727	1/2	102,625	1/2	117,522	1/2	132,420
3/4	3,970	3/4	15,652	3/4	28,804	3/4	43,345	3/4	58,243	3/4	73,140	3/4	88,038	3/4	102,935	3/4	117,833	3/4	132,730
4	4,197	4	15,910	4	29,092	4	43,656	4	58,553	4	73,451	4	88,348	4	103,246	4	118,143	4	133,041
1/4	4,426	1/4	16,171	1/4	29,383	1/4	43,966	1/4	58,864	1/4	73,761	1/4	88,659	1/4	103,556	1/4	118,453	1/4	133,351
1/2	4,656	1/2	16,431	1/2	29,674	1/2	44,277	1/2	59,174	1/2	74,071	1/2	88,969	1/2	103,866	1/2	118,764	1/2	133,661
3/4	4,885	3/4	16,692	3/4	29,965	3/4	44,587	3/4	59,484	3/4	74,382	3/4	89,279	3/4	104,177	3/4	119,074	3/4	133,972
5	5,115	5	16,953	5	30,256	5	44,897	5	59,795	5	74,692	5	89,590	5	104,487	5	119,385	5	134,282
1/4	5,347	1/4	17,216	1/4	30,549	1/4	45,208	1/4	60,105	1/4	75,003	1/4	89,900	1/4	104,797	1/4	119,695	1/4	134,592
1/2	5,580	1/2	17,479	1/2	30,843	1/2	45,518	1/2	60,415	1/2	75,313	1/2	90,210	1/2	105,108	1/2	120,005	1/2	134,903
3/4	5,812	3/4	17,742	3/4	31,136	3/4	45,828	3/4	60,726	3/4	75,623	3/4	90,521	3/4	105,418	3/4	120,316	3/4	135,213
6	6,044	6	18,006	6	31,430	6	46,139	6	61,036	6	75,934	6	90,831	6	105,729	6	120,626	6	135,523
1/4	6,280	1/4	18,271	1/4	31,726	1/4	46,449	1/4	61,347	1/4	76,244	1/4	91,141	1/4	106,039	1/4	120,936	1/4	135,834
1/2	6,515	1/2	18,537	1/2	32,022	1/2	46,759	1/2	61,657	1/2	76,554	1/2	91,452	1/2	106,349	1/2	121,247	1/2	136,144
3/4	6,750	3/4	18,803	3/4	32,318	3/4	47,070	3/4	61,967	3/4	76,865	3/4	91,762	3/4	106,660	3/4	121,557	3/4	136,455
7	6,985	7	19,069	7	32,614	7	47,380	7	62,278	7	77,175	7	92,073	7	106,970	7	121,867	7	136,765
1/4	7,223	1/4	19,337	1/4	32,912	1/4	47,691	1/4	62,588	1/4	77,485	1/4	92,383	1/4	107,280	1/4	122,178	1/4	137,075
1/2	7,461	1/2	19,605	1/2	33,211	1/2	48,001	1/2	62,898	1/2	77,796	1/2	92,693	1/2	107,591	1/2	122,488	1/2	137,386
3/4	7,698	3/4	19,873	3/4	33,510	3/4	48,311	3/4	63,209	3/4	78,106	3/4	93,004	3/4	107,901	3/4	122,799	3/4	137,696
8	7,936	8	20,142	8	33,808	8	48,622	8	63,519	8	78,417	8	93,314	8	108,211	8	123,109	8	138,006
1/4	8,176	1/4	20,413	1/4	34,109	1/4	48,932	1/4	63,829	1/4	78,727	1/4	93,624	1/4	108,522	1/4	123,419	1/4	138,317
1/2	8,417	1/2	20,683	1/2	34,410	1/2	49,242	1/2	64,140	1/2	79,037	1/2	93,935	1/2	108,832	1/2	123,730	1/2	138,627
3/4	8,657	3/4	20,954	3/4	34,712	3/4	49,553	3/4	64,450	3/4	79,348	3/4	94,245	3/4	109,143	3/4	124,040	3/4	138,937
9	8,897	9	21,225	9	35,013	9	49,863	9	64,761	9	79,658	9	94,555	9	109,453	9	124,350	9	139,248
1/4	9,140	1/4	21,499	1/4	35,316	1/4	50,173	1/4	65,071	1/4	79,968	1/4	94,866	1/4	109,763	1/4	124,661	1/4	139,558
1/2	9,383	1/2	21,772	1/2	35,620	1/2	50,484	1/2	65,381	1/2	80,279	1/2	95,176	1/2	110,074	1/2	124,971	1/2	139,869
3/4	9,626	3/4	22,045	3/4	35,924	3/4	50,794	3/4	65,692	3/4	80,589	3/4	95,487	3/4	110,384	3/4	125,281	3/4	140,179
10	9,868	10	22,319	10	36,227	10	51,105	10	66,002	10	80,899	10	95,797	10	110,694	10	125,592	10	140,489
1/4	10,114	1/4	22,595	1/4	36,534	1/4	51,415	1/4	66,312	1/4	81,210	1/4	96,107	1/4	111,005	1/4	125,902	1/4	140,800
1/2	10,359	1/2	22,871	1/2	36,841	1/2	51,725	1/2	66,623	1/2	81,520	1/2	96,418	1/2	111,315	1/2	126,213	1/2	141,110
3/4	10,604	3/4	23,147	3/4	37,147	3/4	52,036	3/4	66,933	3/4	81,831	3/4	96,728	3/4	111,625	3/4	126,523	3/4	141,420
11	10,850	11	23,423	11	37,454	11	52,346	11	67,243	11	82,141	11	97,038	11	111,936	11	126,833	11	141,731
1/4	11,098	1/4	23,701	1/4	37,763	1/4	52,656	1/4	67,554	1/4	82,451	1/4	97,349	1/4	112,246	1/4	127,144	1/4	142,041
1/2	11,346	1/2	23,980	1/2	38,072	1/2	52,967	1/2	67,864	1/2	82,762	1/2	97,659	1/2	112,557	1/2	127,454	1/2	142,351
3/4	11,594	3/4	24,258	3/4	38,381	3/4	53,277	3/4	68,175	3/4	83,072	3/4	97,969	3/4	112,867	3/4	127,764	3/4	142,662

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP LIP OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>

Paul J. Lane



PANUC NGL 431

INCHES
INCHAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-05 3/4"

	10 FT.	11 FT.	12 FT.	13 FT.	14 FT.	15 FT.	16 FT.	17 FT.	18 FT.	19 FT.
0	142,972	0	172,745	0	202,430	0	0	0	0	0
1/4	143,283	1/4	173,055	1/4	202,695	1/4	1/4	1/4	1/4	1/4
1/2	143,593	1/2	173,364	1/2	202,960	1/2	1/2	1/2	1/2	1/2
3/4	143,903	3/4	173,674	3/4	203,226	3/4	3/4	3/4	3/4	3/4
1	144,214	1	173,983	1	203,491	1	1	1	1	1
1/4	144,524	1/4	174,292	1/4	203,711	1/4	1/4	1/4	1/4	1/4
1/2	144,834	1/2	174,602	1/2	203,932	1/2	1/2	1/2	1/2	1/2
3/4	145,145	3/4	174,911	3/4	204,153	3/4	3/4	3/4	3/4	3/4
2	145,455	2	175,221	2	204,374	2	2	2	2	2
1/4	145,765	1/4	175,530	1/4	204,550	1/4	1/4	1/4	1/4	1/4
1/2	146,076	1/2	175,840	1/2	204,727	1/2	1/2	1/2	1/2	1/2
3/4	146,386	3/4	176,149	3/4	204,903	3/4	3/4	3/4	3/4	3/4
3	146,697	3	176,459	3	205,079	3	3	3	3	3
1/4	147,007	1/4	176,768	1/4	205,255	1/4	1/4	1/4	1/4	1/4
1/2	147,317	1/2	177,077	1/2	205,431	1/2	1/2	1/2	1/2	1/2
3/4	147,628	3/4	177,387	3/4	205,607	3/4	3/4	3/4	3/4	3/4
4	147,938	4	177,696	4	205,783	4	4	4	4	4
1/4	148,248	1/4	178,006	1/4	205,959	1/4	1/4	1/4	1/4	1/4
1/2	148,559	1/2	178,315	1/2	206,135	1/2	1/2	1/2	1/2	1/2
3/4	148,869	3/4	178,625	3/4	206,311	3/4	3/4	3/4	3/4	3/4
5	149,179	5	178,934	5	206,487	5	5	5	5	5
1/4	149,490	1/4	179,244	1/4	206,663	1/4	1/4	1/4	1/4	1/4
1/2	149,800	1/2	179,553	1/2	206,839	1/2	1/2	1/2	1/2	1/2
3/4	150,111	3/4	179,863	3/4	207,015	3/4	3/4	3/4	3/4	3/4
6	150,421	6	180,172	6	207,191	6	6	6	6	6
1/4	150,731	1/4	180,481	1/4	207,367	1/4	1/4	1/4	1/4	1/4
1/2	151,042	1/2	180,791	1/2	207,543	1/2	1/2	1/2	1/2	1/2
3/4	151,352	3/4	181,100	3/4	207,719	3/4	3/4	3/4	3/4	3/4
7	151,662	7	181,410	7	207,895	7	7	7	7	7
1/4	151,973	1/4	181,719	1/4	208,071	1/4	1/4	1/4	1/4	1/4
1/2	152,283	1/2	182,029	1/2	208,247	1/2	1/2	1/2	1/2	1/2
3/4	152,593	3/4	182,338	3/4	208,423	3/4	3/4	3/4	3/4	3/4
8	152,904	8	182,648	8	208,599	8	8	8	8	8
1/4	153,214	1/4	182,957	1/4	208,775	1/4	1/4	1/4	1/4	1/4
1/2	153,525	1/2	183,266	1/2	208,951	1/2	1/2	1/2	1/2	1/2
3/4	153,835	3/4	183,576	3/4	209,127	3/4	3/4	3/4	3/4	3/4
9	154,145	9	183,885	9	209,303	9	9	9	9	9
1/4	154,456	1/4	184,195	1/4	209,479	1/4	1/4	1/4	1/4	1/4
1/2	154,766	1/2	184,505	1/2	209,655	1/2	1/2	1/2	1/2	1/2
3/4	155,076	3/4	184,814	3/4	209,831	3/4	3/4	3/4	3/4	3/4
10	155,387	10	185,123	10	209,957	10	10	10	10	10
1/4	155,697	1/4	185,433	1/4	210,133	1/4	1/4	1/4	1/4	1/4
1/2	156,007	1/2	185,742	1/2	210,309	1/2	1/2	1/2	1/2	1/2
3/4	156,318	3/4	186,052	3/4	210,485	3/4	3/4	3/4	3/4	3/4
11	156,628	11	186,361	11	210,661	11	11	11	11	11
1/4	156,939	1/4	186,670	1/4	210,837	1/4	1/4	1/4	1/4	1/4
1/2	157,249	1/2	186,980	1/2	211,013	1/2	1/2	1/2	1/2	1/2
3/4	157,559	3/4	187,289	3/4	211,189	3/4	3/4	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/05/2015 SW

CALCULATED: 03/05/2015 CL

PRINTED: 03/05/2015 CL

CANCELS AND SUPERCEDES

ALL PRIOR TO 03/2015

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>

Paul J. Pearson



DANUC PFL 431

2 FUKI

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-06"

IN	0 FT.	1 FT.	2 FT.	3 FT.	4 FT.	5 FT.	6 FT.	7 FT.	8 FT.	9 FT.
0	850	15,423	29,934	44,455	59,269	74,082	88,895	103,708	118,522	133,335
1/4	1,107	15,731	30,230	44,764	59,577	74,390	89,204	104,017	118,830	133,643
1/2	1,364	16,040	30,526	45,073	59,886	74,699	89,512	104,326	119,139	133,952
3/4	1,621	16,348	30,822	45,381	60,194	75,008	89,821	104,634	119,447	134,261
1	1,878	16,657	31,118	45,690	60,503	75,316	90,130	104,943	119,756	134,569
1/4	2,183	16,966	31,414	45,998	60,812	75,625	90,438	105,251	120,065	134,878
1/2	2,487	17,274	31,710	46,307	61,120	75,934	90,747	105,560	120,373	135,186
3/4	2,791	17,583	32,006	46,616	61,429	76,242	91,055	105,869	120,682	135,495
1	3,096	17,891	32,302	46,924	61,738	76,551	91,364	106,177	120,990	135,804
1/4	3,402	18,200	32,599	47,233	62,046	76,859	91,673	106,486	121,299	136,112
1/2	3,708	18,509	32,895	47,542	62,355	77,168	91,981	106,794	121,608	136,421
3/4	4,015	18,817	33,191	47,850	62,663	77,477	92,290	107,103	121,916	136,730
1	4,321	19,126	33,488	48,159	62,972	77,785	92,598	107,412	122,225	137,038
1/4	4,628	19,434	33,784	48,467	63,281	78,094	92,907	107,720	122,534	137,347
1/2	4,936	19,743	34,081	48,776	63,589	78,402	93,216	108,029	122,842	137,655
3/4	5,243	20,052	34,377	49,085	63,898	78,711	93,524	108,338	123,151	137,964
1	5,551	20,360	34,673	49,393	64,206	79,020	93,833	108,646	123,459	138,273
1/4	5,859	20,669	34,970	49,702	64,515	79,328	94,141	108,955	123,768	138,581
1/2	6,167	20,977	35,267	50,010	64,824	79,637	94,450	109,263	124,077	138,890
3/4	6,475	21,286	35,564	50,319	65,132	79,945	94,759	109,572	124,385	139,198
1	6,783	21,595	35,861	50,628	65,441	80,254	95,067	109,881	124,694	139,507
1/4	7,091	21,903	36,158	50,936	65,749	80,563	95,376	110,189	125,002	139,816
1/2	7,400	22,212	36,455	51,245	66,058	80,871	95,685	110,498	125,311	140,124
3/4	7,708	22,520	36,752	51,553	66,367	81,180	95,993	110,806	125,620	140,433
1	8,016	22,829	37,049	51,862	66,675	81,489	96,302	111,115	125,928	140,741
1/4	8,325	23,125	37,357	52,171	66,984	81,797	96,610	111,424	126,237	141,050
1/2	8,634	23,421	37,666	52,479	67,292	82,106	96,919	111,732	126,545	141,359
3/4	8,942	23,717	37,975	52,788	67,601	82,414	97,228	112,041	126,854	141,667
1	9,251	24,013	38,283	53,096	67,910	82,723	97,536	112,349	127,163	141,976
1/4	9,559	24,309	38,592	53,405	68,218	83,032	97,845	112,658	127,471	142,285
1/2	9,868	24,605	38,900	53,714	68,527	83,340	98,153	112,967	127,780	142,593
3/4	10,176	24,901	39,209	54,022	68,836	83,649	98,462	113,275	128,088	142,902
1	10,485	25,197	39,518	54,331	69,144	83,957	98,771	113,584	128,397	143,210
1/4	10,794	25,493	39,826	54,640	69,453	84,266	99,079	113,892	128,706	143,519
1/2	11,102	25,790	40,135	54,948	69,761	84,575	99,388	114,201	129,014	143,828
3/4	11,411	26,086	40,443	55,257	70,070	84,883	99,696	114,510	129,323	144,136
1	11,719	26,382	40,752	55,565	70,379	85,192	100,005	114,818	129,632	144,445
1/4	12,028	26,678	41,061	55,874	70,687	85,500	100,314	115,127	129,940	144,753
1/2	12,337	26,974	41,369	56,183	70,996	85,809	100,622	115,436	130,249	145,062
3/4	12,645	27,270	41,678	56,491	71,304	86,118	100,931	115,744	130,557	145,371
1	12,954	27,566	41,987	56,800	71,613	86,426	101,239	116,053	130,866	145,679
1/4	13,262	27,862	42,295	57,108	71,922	86,735	101,548	116,361	131,175	145,988
1/2	13,571	28,158	42,604	57,417	72,230	87,043	101,857	116,670	131,483	146,296
3/4	13,880	28,454	42,912	57,726	72,539	87,352	102,165	116,979	131,792	146,605
1	14,188	28,750	43,221	58,034	72,847	87,661	102,474	117,287	132,100	146,914
1/4	14,497	29,046	43,530	58,343	73,156	87,969	102,783	117,596	132,409	147,222
1/2	14,805	29,342	43,838	58,651	73,465	88,278	103,091	117,904	132,718	147,531
3/4	15,114	29,638	44,147	58,960	73,773	88,587	103,400	118,213	133,026	147,839

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE ONLY APPLIES TO EXTREME HEIGHT OF TANK.

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-09" FORWARD OF AFT BULKHEAD.

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>

Signature



DANCO PGL 431

2 FOR 1
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

CAPACITIES GIVEN IN WHOLE GALLONS												GAUGE HEIGHT 15'-06"											
10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.					
IN	N	IN	N	IN	N	IN	N	IN	N	IN	N	IN	N	IN	N	IN	N	IN	N				
0	148,148	0	162,961	0	177,753	0	192,522	0	207,269	0		0		0		0		0					
1/4	148,457	1/4	163,270	1/4	178,060	1/4	192,830	1/4	207,533	1/4		1/4		1/4		1/4		1/4					
1/2	148,765	1/2	163,579	1/2	178,368	1/2	193,137	1/2	207,796	1/2		1/2		1/2		1/2		1/2					
3/4	149,074	3/4	163,887	3/4	178,676	3/4	193,445	3/4	208,060	3/4		3/4		3/4		3/4		3/4					
1	149,383	1	164,196	1	178,983	1	193,753	1	208,324	1		1		1		1		1					
1/4	149,691	1/4	164,504	1/4	179,291	1/4	194,060	1/4	208,543	1/4		1/4		1/4		1/4		1/4					
1/2	150,000	1/2	164,813	1/2	179,599	1/2	194,368	1/2	208,763	1/2		1/2		1/2		1/2		1/2					
3/4	150,308	3/4	165,122	3/4	179,906	3/4	194,676	3/4	208,982	3/4		3/4		3/4		3/4		3/4					
2	150,617	2	165,430	2	180,214	2	194,984	2	209,202	2		2		2		2		2					
1/4	150,926	1/4	165,739	1/4	180,522	1/4	195,291	1/4	209,377	1/4		1/4		1/4		1/4		1/4					
1/2	151,234	1/2	166,047	1/2	180,830	1/2	195,599	1/2	209,553	1/2		1/2		1/2		1/2		1/2					
3/4	151,543	3/4	166,356	3/4	181,137	3/4	195,907	3/4	209,728	3/4		3/4		3/4		3/4		3/4					
3	151,851	3	166,665	3	181,445	3	196,214	3	209,904	3		3		3		3		3					
1/4	152,160	1/4	166,973	1/4	181,753	1/4	196,522	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	152,469	1/2	167,282	1/2	182,060	1/2	196,830	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	152,777	3/4	167,590	3/4	182,368	3/4	197,137	3/4		3/4		3/4		3/4		3/4		3/4					
4	153,086	4	167,899	4	182,676	4	197,445	4		4		4		4		4		4					
1/4	153,394	1/4	168,208	1/4	182,983	1/4	197,753	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	153,703	1/2	168,516	1/2	183,291	1/2	198,060	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	154,012	3/4	168,825	3/4	183,599	3/4	198,368	3/4		3/4		3/4		3/4		3/4		3/4					
5	154,320	5	169,133	5	183,907	5	198,676	5		5		5		5		5		5					
1/4	154,629	1/4	169,442	1/4	184,214	1/4	198,984	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	154,937	1/2	169,751	1/2	184,522	1/2	199,291	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	155,246	3/4	170,059	3/4	184,830	3/4	199,599	3/4		3/4		3/4		3/4		3/4		3/4					
6	155,555	6	170,368	6	185,137	6	199,907	6		6		6		6		6		6					
1/4	155,863	1/4	170,676	1/4	185,445	1/4	200,214	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	156,172	1/2	170,983	1/2	185,753	1/2	200,522	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	156,481	3/4	171,291	3/4	186,060	3/4	200,830	3/4		3/4		3/4		3/4		3/4		3/4					
7	156,789	7	171,599	7	186,368	7	201,137	7		7		7		7		7		7					
1/4	157,098	1/4	171,906	1/4	186,676	1/4	201,445	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	157,406	1/2	172,214	1/2	186,983	1/2	201,753	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	157,715	3/4	172,522	3/4	187,291	3/4	202,061	3/4		3/4		3/4		3/4		3/4		3/4					
8	158,024	8	172,829	8	187,599	8	202,368	8		8		8		8		8		8					
1/4	158,332	1/4	173,137	1/4	187,907	1/4	202,676	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	158,641	1/2	173,445	1/2	188,214	1/2	202,984	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	158,949	3/4	173,753	3/4	188,522	3/4	203,291	3/4		3/4		3/4		3/4		3/4		3/4					
9	159,258	9	174,060	9	188,830	9	203,599	9		9		9		9		9		9					
1/4	159,567	1/4	174,368	1/4	189,137	1/4	203,907	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	159,875	1/2	174,676	1/2	189,445	1/2	204,214	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	160,184	3/4	174,983	3/4	189,753	3/4	204,522	3/4		3/4		3/4		3/4		3/4		3/4					
10	160,492	10	175,291	10	190,060	10	204,830	10		10		10		10		10		10					
1/4	160,801	1/4	175,599	1/4	190,368	1/4	205,137	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	161,110	1/2	175,906	1/2	190,676	1/2	205,445	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	161,418	3/4	176,214	3/4	190,983	3/4	205,753	3/4		3/4		3/4		3/4		3/4		3/4					
11	161,727	11	176,522	11	191,291	11	206,061	11		11		11		11		11		11					
1/4	162,035	1/4	176,830	1/4	191,599	1/4	206,363	1/4		1/4		1/4		1/4		1/4		1/4					
1/2	162,344	1/2	177,137	1/2	191,907	1/2	206,665	1/2		1/2		1/2		1/2		1/2		1/2					
3/4	162,653	3/4	177,445	3/4	192,214	3/4	206,967	3/4		3/4		3/4		3/4		3/4		3/4					

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/05/2015 SW

CALCULATED: 03/05/2015 CL

PRINTED: 03/05/2015 CL

CANCELS AND SUPERCEDES
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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The PMA



DANUE IN L 431

2 3102

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-06"

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN
0	850	0	15,420	0	30,208	0	45,006	0	59,816	0	74,626	0	89,435	0	104,245	0	119,055	0	133,864
1/4	1,107	1/4	16,729	1/4	30,516	1/4	45,315	1/4	60,124	1/4	74,934	1/4	89,744	1/4	104,554	1/4	119,363	1/4	134,173
1/2	1,364	1/2	16,038	1/2	30,824	1/2	45,623	1/2	60,433	1/2	75,243	1/2	90,052	1/2	104,862	1/2	119,672	1/2	134,482
3/4	1,621	3/4	16,346	3/4	31,131	3/4	45,932	3/4	60,741	3/4	75,551	3/4	90,361	3/4	105,171	3/4	119,980	3/4	134,790
1	1,878	1	16,655	1	31,439	1	46,240	1	61,050	1	75,860	1	90,669	1	105,479	1	120,289	1	135,099
1/4	2,182	1/4	16,963	1/4	31,746	1/4	46,549	1/4	61,359	1/4	76,168	1/4	90,978	1/4	105,788	1/4	120,597	1/4	135,407
1/2	2,487	1/2	17,272	1/2	32,054	1/2	46,857	1/2	61,667	1/2	76,477	1/2	91,287	1/2	106,096	1/2	120,906	1/2	135,716
3/4	2,792	3/4	17,580	3/4	32,362	3/4	47,166	3/4	61,976	3/4	76,785	3/4	91,595	3/4	106,405	3/4	121,215	3/4	136,024
2	3,096	2	17,889	2	32,669	2	47,474	2	62,284	2	77,094	2	91,904	2	106,713	2	121,523	2	136,333
1/4	3,402	1/4	18,197	1/4	32,977	1/4	47,783	1/4	62,593	1/4	77,402	1/4	92,212	1/4	107,022	1/4	121,832	1/4	136,641
1/2	3,709	1/2	18,506	1/2	33,285	1/2	48,091	1/2	62,901	1/2	77,711	1/2	92,521	1/2	107,330	1/2	122,140	1/2	136,950
3/4	4,015	3/4	18,814	3/4	33,593	3/4	48,400	3/4	63,210	3/4	78,019	3/4	92,829	3/4	107,639	3/4	122,449	3/4	137,258
3	4,322	3	19,123	3	33,901	3	48,709	3	63,518	3	78,328	3	93,138	3	107,947	3	122,757	3	137,567
1/4	4,629	1/4	19,431	1/4	34,209	1/4	49,017	1/4	63,827	1/4	78,637	1/4	93,446	1/4	108,256	1/4	123,066	1/4	137,875
1/2	4,936	1/2	19,740	1/2	34,517	1/2	49,326	1/2	64,135	1/2	78,945	1/2	93,755	1/2	108,565	1/2	123,374	1/2	138,184
3/4	5,244	3/4	20,048	3/4	34,825	3/4	49,634	3/4	64,444	3/4	79,254	3/4	94,063	3/4	108,873	3/4	123,683	3/4	138,493
4	5,551	4	20,357	4	35,133	4	49,943	4	64,752	4	79,562	4	94,372	4	109,182	4	123,991	4	138,801
1/4	5,859	1/4	20,665	1/4	35,441	1/4	50,251	1/4	65,061	1/4	79,871	1/4	94,680	1/4	109,490	1/4	124,300	1/4	139,110
1/2	6,167	1/2	20,974	1/2	35,750	1/2	50,560	1/2	65,369	1/2	80,179	1/2	94,989	1/2	109,799	1/2	124,608	1/2	139,418
3/4	6,475	3/4	21,283	3/4	36,059	3/4	50,868	3/4	65,678	3/4	80,488	3/4	95,297	3/4	110,107	3/4	124,917	3/4	139,727
5	6,783	5	21,591	5	36,367	5	51,177	5	65,987	5	80,796	5	95,606	5	110,416	5	125,225	5	140,035
1/4	7,091	1/4	21,900	1/4	36,676	1/4	51,485	1/4	66,295	1/4	81,105	1/4	95,915	1/4	110,724	1/4	125,534	1/4	140,344
1/2	7,399	1/2	22,208	1/2	36,984	1/2	51,794	1/2	66,604	1/2	81,413	1/2	96,223	1/2	111,033	1/2	125,843	1/2	140,652
3/4	7,708	3/4	22,517	3/4	37,293	3/4	52,102	3/4	66,912	3/4	81,722	3/4	96,532	3/4	111,341	3/4	126,151	3/4	140,961
6	8,016	6	22,825	6	37,601	6	52,411	6	67,221	6	82,030	6	96,840	6	111,650	6	126,460	6	141,269
1/4	8,324	1/4	23,133	1/4	37,910	1/4	52,720	1/4	67,529	1/4	82,339	1/4	97,149	1/4	111,958	1/4	126,768	1/4	141,578
1/2	8,633	1/2	23,440	1/2	38,218	1/2	53,028	1/2	67,838	1/2	82,648	1/2	97,457	1/2	112,267	1/2	127,077	1/2	141,886
3/4	8,941	3/4	23,748	3/4	38,527	3/4	53,337	3/4	68,146	3/4	82,956	3/4	97,766	3/4	112,575	3/4	127,385	3/4	142,195
7	9,250	7	24,056	7	38,835	7	53,645	7	68,455	7	83,265	7	98,074	7	112,884	7	127,694	7	142,503
1/4	9,558	1/4	24,363	1/4	39,144	1/4	53,954	1/4	68,763	1/4	83,573	1/4	98,383	1/4	113,193	1/4	128,002	1/4	142,812
1/2	9,867	1/2	24,671	1/2	39,452	1/2	54,262	1/2	69,072	1/2	83,882	1/2	98,691	1/2	113,501	1/2	128,311	1/2	143,121
3/4	10,176	3/4	24,979	3/4	39,761	3/4	54,571	3/4	69,380	3/4	84,190	3/4	99,000	3/4	113,810	3/4	128,619	3/4	143,429
8	10,484	8	25,286	8	40,070	8	54,879	8	69,689	8	84,499	8	99,308	8	114,118	8	128,928	8	143,738
1/4	10,793	1/4	25,594	1/4	40,378	1/4	55,188	1/4	69,998	1/4	84,807	1/4	99,617	1/4	114,427	1/4	129,236	1/4	144,046
1/2	11,101	1/2	25,901	1/2	40,687	1/2	55,496	1/2	70,306	1/2	85,116	1/2	99,926	1/2	114,735	1/2	129,545	1/2	144,355
3/4	11,410	3/4	26,209	3/4	40,995	3/4	55,805	3/4	70,615	3/4	85,424	3/4	100,234	3/4	115,044	3/4	129,854	3/4	144,663
9	11,718	9	26,517	9	41,304	9	56,113	9	70,923	9	85,733	9	100,543	9	115,352	9	130,162	9	144,972
1/4	12,027	1/4	26,824	1/4	41,612	1/4	56,422	1/4	71,232	1/4	86,041	1/4	100,851	1/4	115,661	1/4	130,471	1/4	145,280
1/2	12,335	1/2	27,132	1/2	41,921	1/2	56,730	1/2	71,540	1/2	86,350	1/2	101,160	1/2	115,969	1/2	130,779	1/2	145,589
3/4	12,644	3/4	27,440	3/4	42,229	3/4	57,039	3/4	71,849	3/4	86,658	3/4	101,468	3/4	116,278	3/4	131,088	3/4	145,897
10	12,952	10	27,747	10	42,538	10	57,348	10	72,157	10	86,967	10	101,777	10	116,586	10	131,396	10	146,206
1/4	13,261	1/4	28,055	1/4	42,846	1/4	57,656	1/4	72,466	1/4	87,276	1/4	102,085	1/4	116,895	1/4	131,705	1/4	146,514
1/2	13,569	1/2	28,363	1/2	43,155	1/2	57,965	1/2	72,774	1/2	87,584	1/2	102,394	1/2	117,204	1/2	132,013	1/2	146,823
3/4	13,878	3/4	28,670	3/4	43,463	3/4	58,273	3/4	73,083	3/4	87,893	3/4	102,702	3/4	117,512	3/4	132,322	3/4	147,132
11	14,186	11	28,978	11	43,772	11	58,582	11	73,391	11	88,201	11	103,011	11	117,821	11	132,630	11	147,440
1/4	14,495	1/4	29,285	1/4	44,081	1/4	58,890	1/4	73,700	1/4	88,510	1/4	103,319	1/4	118,129	1/4	132,939	1/4	147,749
1/2	14,803	1/2	29,593	1/2	44,389	1/2	59,199	1/2	74,008	1/2	88,818	1/2	103,628	1/2	118,438	1/2	133,247	1/2	148,057
3/4	15,112	3/4	29,901	3/4	44,698	3/4	59,507	3/4	74,317	3/4	89,127	3/4	103,936	3/4	118,746	3/4	133,556	3/4	148,366

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP LIP OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 42'-09" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

<http://www.pmacorp.net>

Paul J. Blum



DANCO PFL 431

23100
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

		10 FT.		11 FT.		12 FT.		13 FT.		14 FT.		15 FT.		16 FT.		17 FT.		18 FT.		19 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	148,674	0	163,484	0	178,272	0	193,038	0	207,781	0	222,501	0	237,200	0	251,879	0	266,538	0	281,178	0	295,799
1/4	148,983	1/4	163,792	1/4	178,581	1/4	193,345	1/4	208,088	1/4	222,808	1/4	237,507	1/4	252,186	1/4	266,845	1/4	281,485	1/4	296,106
1/2	149,291	1/2	164,101	1/2	178,887	1/2	193,653	1/2	208,396	1/2	223,116	1/2	237,815	1/2	252,494	1/2	267,153	1/2	281,793	1/2	296,414
3/4	149,600	3/4	164,410	3/4	179,195	3/4	193,960	3/4	208,706	3/4	223,421	3/4	238,120	3/4	252,799	3/4	267,462	3/4	282,101	3/4	296,725
1	149,908	1	164,718	1	179,502	1	194,268	1	209,011	1	223,729	1	238,428	1	253,107	1	267,770	1	282,409	1	297,032
1/4	150,217	1/4	165,027	1/4	179,810	1/4	194,576	1/4	210,319	1/4	224,038	1/4	238,737	1/4	253,416	1/4	268,079	1/4	282,718	1/4	297,341
1/2	150,525	1/2	165,335	1/2	180,117	1/2	194,883	1/2	210,628	1/2	224,349	1/2	239,048	1/2	253,726	1/2	268,386	1/2	283,026	1/2	297,649
3/4	150,834	3/4	165,644	3/4	180,425	3/4	195,191	3/4	210,939	3/4	224,660	3/4	239,359	3/4	254,037	3/4	268,695	3/4	283,335	3/4	297,958
2	151,142	2	165,952	2	180,733	2	195,499	2	211,250	2	224,971	2	239,670	2	254,345	2	269,003	2	283,644	2	298,267
1/4	151,451	1/4	166,261	1/4	181,040	1/4	195,806	1/4	211,561	1/4	225,282	1/4	240,001	1/4	254,654	1/4	269,312	1/4	283,953	1/4	298,576
1/2	151,760	1/2	166,569	1/2	181,348	1/2	196,114	1/2	211,872	1/2	225,593	1/2	240,312	1/2	254,963	1/2	269,621	1/2	284,262	1/2	298,885
3/4	152,068	3/4	166,878	3/4	181,656	3/4	196,421	3/4	212,183	3/4	225,904	3/4	240,623	3/4	255,272	3/4	269,929	3/4	284,571	3/4	299,194
3	152,377	3	167,186	3	181,963	3	196,729	3	212,494	3	226,215	3	240,934	3	255,581	3	270,236	3	284,880	3	299,503
1/4	152,685	1/4	167,495	1/4	182,271	1/4	197,037	1/4	212,805	1/4	226,526	1/4	241,245	1/4	255,890	1/4	270,545	1/4	285,189	1/4	299,812
1/2	152,994	1/2	167,803	1/2	182,578	1/2	197,344	1/2	213,116	1/2	226,837	1/2	241,556	1/2	256,201	1/2	270,854	1/2	285,498	1/2	300,121
3/4	153,302	3/4	168,112	3/4	182,886	3/4	197,652	3/4	213,427	3/4	227,148	3/4	241,867	3/4	256,510	3/4	271,162	3/4	285,807	3/4	300,430
4	153,611	4	168,421	4	183,194	4	197,960	4	213,738	4	227,459	4	242,178	4	256,819	4	271,471	4	286,116	4	300,739
1/4	153,919	1/4	168,729	1/4	183,501	1/4	198,267	1/4	214,049	1/4	227,770	1/4	242,489	1/4	257,129	1/4	271,780	1/4	286,425	1/4	301,048
1/2	154,228	1/2	169,038	1/2	183,809	1/2	198,575	1/2	214,360	1/2	228,081	1/2	242,799	1/2	257,438	1/2	272,089	1/2	286,734	1/2	301,357
3/4	154,536	3/4	169,346	3/4	184,117	3/4	198,882	3/4	214,671	3/4	228,392	3/4	243,109	3/4	257,747	3/4	272,398	3/4	287,043	3/4	301,666
5	154,845	5	169,655	5	184,424	5	199,190	5	214,982	5	228,703	5	243,419	5	258,056	5	272,707	5	287,352	5	301,975
1/4	155,153	1/4	169,963	1/4	184,732	1/4	199,498	1/4	215,293	1/4	229,014	1/4	243,728	1/4	258,365	1/4	273,016	1/4	287,661	1/4	302,284
1/2	155,462	1/2	170,272	1/2	185,039	1/2	199,805	1/2	215,604	1/2	229,325	1/2	244,037	1/2	258,674	1/2	273,325	1/2	287,970	1/2	302,593
3/4	155,771	3/4	170,580	3/4	185,347	3/4	200,113	3/4	215,915	3/4	229,636	3/4	244,348	3/4	258,983	3/4	273,634	3/4	288,279	3/4	302,902
6	156,079	6	170,889	6	185,655	6	200,421	6	216,224	6	230,000	6	244,659	6	259,291	6	273,943	6	288,588	6	303,211
1/4	156,388	1/4	171,196	1/4	185,962	1/4	200,728	1/4	216,535	1/4	230,311	1/4	244,970	1/4	259,600	1/4	274,252	1/4	288,897	1/4	303,520
1/2	156,696	1/2	171,504	1/2	186,270	1/2	201,036	1/2	216,846	1/2	230,622	1/2	245,281	1/2	259,909	1/2	274,561	1/2	289,206	1/2	303,829
3/4	157,005	3/4	171,812	3/4	186,578	3/4	201,343	3/4	217,157	3/4	230,933	3/4	245,592	3/4	260,218	3/4	274,870	3/4	289,515	3/4	304,138
7	157,313	7	172,119	7	186,885	7	201,651	7	217,468	7	231,244	7	245,903	7	260,526	7	275,179	7	289,824	7	304,447
1/4	157,622	1/4	172,427	1/4	187,193	1/4	201,959	1/4	217,779	1/4	231,555	1/4	246,214	1/4	260,835	1/4	275,488	1/4	290,133	1/4	304,756
1/2	157,930	1/2	172,735	1/2	187,500	1/2	202,266	1/2	218,090	1/2	231,866	1/2	246,525	1/2	261,146	1/2	275,797	1/2	290,442	1/2	305,065
3/4	158,239	3/4	173,042	3/4	187,808	3/4	202,574	3/4	218,401	3/4	232,177	3/4	246,836	3/4	261,457	3/4	276,106	3/4	290,751	3/4	305,374
8	158,547	8	173,350	8	188,116	8	202,882	8	218,712	8	232,488	8	247,147	8	261,768	8	276,415	8	291,059	8	305,683
1/4	158,856	1/4	173,657	1/4	188,423	1/4	203,189	1/4	219,023	1/4	232,799	1/4	247,458	1/4	262,079	1/4	276,724	1/4	291,368	1/4	305,992
1/2	159,164	1/2	173,965	1/2	188,731	1/2	203,497	1/2	219,334	1/2	233,110	1/2	247,769	1/2	262,389	1/2	277,033	1/2	291,677	1/2	306,301
3/4	159,473	3/4	174,273	3/4	189,039	3/4	203,804	3/4	219,645	3/4	233,421	3/4	248,080	3/4	262,698	3/4	277,342	3/4	291,986	3/4	306,610
9	159,782	9	174,580	9	189,346	9	204,112	9	220,000	9	233,732	9	248,391	9	263,007	9	277,651	9	292,295	9	306,919
1/4	160,090	1/4	174,888	1/4	189,654	1/4	204,420	1/4	220,311	1/4	234,043	1/4	248,702	1/4	263,318	1/4	277,960	1/4	292,604	1/4	307,228
1/2	160,399	1/2	175,196	1/2	189,961	1/2	204,727	1/2	220,622	1/2	234,354	1/2	249,013	1/2	263,629	1/2	278,269	1/2	292,913	1/2	307,537
3/4	160,707	3/4	175,503	3/4	190,269	3/4	205,035	3/4	220,933	3/4	234,665	3/4	249,324	3/4	263,940	3/4	278,578	3/4	293,222	3/4	307,846
10	161,016	10	175,811	10	190,577	10	205,342	10	221,244	10	234,976	10	249,635	10	264,251	10	278,887	10	293,527	10	308,155
1/4	161,324	1/4	176,118	1/4	190,884	1/4	205,650	1/4	221,555	1/4	235,287	1/4	250,000	1/4	264,560	1/4	279,196	1/4	293,836	1/4	308,464
1/2	161,633	1/2	176,426	1/2	191,192	1/2	205,958	1/2	221,866	1/2	235,598	1/2	250,311	1/2	264,869	1/2	279,505	1/2	294,145	1/2	308,773
3/4	161,941	3/4	176,734	3/4	191,499	3/4	206,265	3/4	222,177	3/4	235,909	3/4	250,622	3/4	265,179	3/4	279,814	3/4	294,454	3/4	309,082
11	162,250	11	177,041	11	191,807	11	206,573	11	222,488	11	236,220	11	250,933	11	265,488	11	280,123	11	294,763	11	309,391
1/4	162,558	1/4	177,349	1/4	192,115	1/4	206,875	1/4	222,799	1/4	236,531	1/4	251,244	1/4	265,799	1/4	280,432	1/4	295,072	1/4	309,700
1/2	162,867	1/2	177,656	1/2	192,422	1/2	207,177	1/2	223,110	1/2	236,842	1/2	251,556	1/2	266,108	1/2	280,741	1/2	295,381	1/2	310,009
3/4	163,175	3/4	177,964	3/4	192,730	3/4	207,479	3/4	223,421	3/4	237,153	3/4	251,867	3/4	266,417	3/4	281,050	3/4	295,690	3/4	310,318

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/05/2015 SW
CALCULATED: 03/05/2015 CL
PRINTED: 03/05/2015 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>

P. J. Hearn



MANUEL PUL 431

3 FUKI

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-05 3/4"

IN	0 FT.	1 FT.	2 FT.	3 FT.	4 FT.	5 FT.	6 FT.	7 FT.	8 FT.	9 FT.
0	972	17,692	34,436	51,167	68,020	84,846	101,806	118,789	135,754	152,718
1/4	1,267	18,046	34,779	51,520	68,370	85,198	102,160	119,142	136,108	153,072
1/2	1,562	18,400	35,122	51,874	68,719	85,549	102,514	119,496	136,461	153,425
3/4	1,858	18,754	35,466	52,227	69,069	85,901	102,868	119,849	136,815	153,779
1	2,153	19,108	35,809	52,580	69,418	86,253	103,222	120,203	137,168	154,132
1/4	2,503	19,462	36,153	52,934	69,768	86,605	103,576	120,556	137,521	154,485
1/2	2,852	19,816	36,496	53,287	70,117	86,957	103,930	120,910	137,875	154,839
3/4	3,202	20,170	36,839	53,640	70,467	87,308	104,283	121,263	138,228	155,192
2	3,552	20,523	37,183	53,994	70,816	87,660	104,637	121,617	138,582	155,546
1/4	3,904	20,877	37,527	54,347	71,166	88,012	104,991	121,970	138,935	155,899
1/2	4,256	21,231	37,870	54,700	71,515	88,364	105,345	122,324	139,289	156,253
3/4	4,608	21,585	38,214	55,054	71,865	88,716	105,699	122,677	139,642	156,606
3	4,960	21,939	38,558	55,407	72,214	89,067	106,053	123,031	139,995	156,959
1/4	5,313	22,293	38,901	55,761	72,562	89,421	106,407	123,384	140,349	157,313
1/2	5,666	22,647	39,245	56,114	72,909	89,775	106,761	123,738	140,702	157,666
3/4	6,019	23,001	39,589	56,467	73,257	90,129	107,114	124,091	141,056	158,020
4	6,372	23,354	39,932	56,821	73,605	90,483	107,468	124,445	141,409	158,373
1/4	6,725	23,708	40,277	57,174	73,952	90,837	107,822	124,798	141,762	158,726
1/2	7,078	24,062	40,621	57,527	74,300	91,191	108,176	125,151	142,116	159,080
3/4	7,432	24,416	40,965	57,881	74,647	91,544	108,530	125,505	142,469	159,433
5	7,785	24,770	41,310	58,234	74,995	91,898	108,884	125,858	142,823	159,787
1/4	8,139	25,124	41,654	58,583	75,347	92,252	109,238	126,212	143,176	160,140
1/2	8,492	25,478	41,998	58,933	75,699	92,606	109,591	126,565	143,530	160,494
3/4	8,845	25,832	42,342	59,282	76,051	92,960	109,945	126,919	143,883	160,847
6	9,199	26,186	42,687	59,632	76,402	93,314	110,299	127,272	144,236	161,200
1/4	9,553	26,530	43,040	59,981	76,754	93,668	110,653	127,626	144,590	161,554
1/2	9,907	26,873	43,393	60,331	77,106	94,021	111,007	127,979	144,943	161,907
3/4	10,261	27,217	43,747	60,681	77,458	94,375	111,361	128,333	145,297	162,261
7	10,615	27,561	44,100	61,030	77,810	94,729	111,715	128,686	145,650	162,614
1/4	10,968	27,905	44,453	61,380	78,161	95,083	112,068	129,039	146,003	162,967
1/2	11,322	28,249	44,807	61,729	78,513	95,437	112,422	129,393	146,357	163,321
3/4	11,676	28,593	45,160	62,079	78,865	95,791	112,776	129,746	146,710	163,674
8	12,030	28,937	45,514	62,428	79,217	96,145	113,130	130,100	147,064	164,028
1/4	12,384	29,281	45,867	62,778	79,569	96,499	113,484	130,453	147,417	164,381
1/2	12,738	29,625	46,220	63,127	79,920	96,852	113,838	130,807	147,771	164,735
3/4	13,092	29,969	46,574	63,477	80,272	97,206	114,192	131,160	148,124	165,088
9	13,446	30,313	46,927	63,826	80,624	97,560	114,546	131,513	148,477	165,441
1/4	13,800	30,657	47,280	64,176	80,976	97,914	114,899	131,867	148,831	165,795
1/2	14,153	31,001	47,634	64,525	81,328	98,268	115,253	132,220	149,184	166,148
3/4	14,507	31,345	47,987	64,875	81,679	98,622	115,607	132,574	149,538	166,502
10	14,861	31,689	48,340	65,224	82,031	98,976	115,961	132,927	149,891	166,855
1/4	15,215	32,032	48,694	65,574	82,383	99,329	116,314	133,280	150,244	167,209
1/2	15,569	32,375	49,047	65,923	82,735	99,683	116,668	133,634	150,598	167,562
3/4	15,923	32,719	49,400	66,273	83,087	100,037	117,021	133,987	150,951	167,915
11	16,277	33,062	49,754	66,622	83,438	100,391	117,375	134,341	151,305	168,268
1/4	16,631	33,406	50,107	66,972	83,790	100,745	117,728	134,694	151,658	168,621
1/2	16,985	33,749	50,460	67,321	84,142	101,099	118,082	135,048	152,012	168,974
3/4	17,338	34,092	50,814	67,671	84,494	101,453	118,435	135,401	152,365	169,327

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP LIP OF 2" "HERMETIC" VALVE

GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 55'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
& ANALYSIS, INC.

P.O. Box 2092

Pearland, Texas 77588

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Signature



DATA PAGE 431

3 FUKI

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-05 3/4"

	10 FT.	11 FT.	12 FT.	13 FT.	14 FT.	15 FT.	16 FT.	17 FT.	18 FT.	19 FT.
0	168,742	0	191,367	0	202,655	0	213,863	0	0	0
1/4	168,978	1/4	191,602	1/4	202,890	1/4	214,046	1/4	1/4	1/4
1/2	169,214	1/2	191,837	1/2	203,125	1/2	214,228	1/2	1/2	1/2
3/4	169,449	3/4	192,072	3/4	203,360	3/4	214,410	3/4	3/4	3/4
1	169,685	1	192,307	1	203,595	1	214,593	1	1	1
1/4	169,921	1/4	192,543	1/4	203,830	1/4	214,724	1/4	1/4	1/4
1/2	170,157	1/2	192,778	1/2	204,066	1/2	214,856	1/2	1/2	1/2
3/4	170,393	3/4	193,013	3/4	204,301	3/4	214,988	3/4	3/4	3/4
2	170,629	2	193,248	2	204,536	2	215,119	2	2	2
1/4	170,864	1/4	193,483	1/4	204,771	1/4	215,200	1/4	1/4	1/4
1/2	171,100	1/2	193,718	1/2	205,006	1/2	215,281	1/2	1/2	1/2
3/4	171,336	3/4	193,954	3/4	205,241	3/4	215,362	3/4	3/4	3/4
3	171,572	3	194,189	3	205,477	3	215,443	3	3	3
1/4	171,808	1/4	194,424	1/4	205,712	1/4	215,524	1/4	1/4	1/4
1/2	172,044	1/2	194,659	1/2	205,947	1/2	215,605	1/2	1/2	1/2
3/4	172,280	3/4	194,894	3/4	206,182	3/4	215,686	3/4	3/4	3/4
4	172,515	4	195,129	4	206,417	4	215,767	4	4	4
1/4	172,751	1/4	195,365	1/4	206,652	1/4	215,848	1/4	1/4	1/4
1/2	172,987	1/2	195,600	1/2	206,887	1/2	215,929	1/2	1/2	1/2
3/4	173,223	3/4	195,835	3/4	207,123	3/4	216,010	3/4	3/4	3/4
5	173,459	5	196,070	5	207,358	5	216,091	5	5	5
1/4	173,695	1/4	196,305	1/4	207,593	1/4	216,172	1/4	1/4	1/4
1/2	173,931	1/2	196,540	1/2	207,828	1/2	216,253	1/2	1/2	1/2
3/4	174,166	3/4	196,776	3/4	208,063	3/4	216,334	3/4	3/4	3/4
6	174,402	6	197,011	6	208,298	6	216,415	6	6	6
1/4	174,638	1/4	197,246	1/4	208,533	1/4	216,496	1/4	1/4	1/4
1/2	174,874	1/2	197,481	1/2	208,768	1/2	216,577	1/2	1/2	1/2
3/4	175,110	3/4	197,716	3/4	208,997	3/4	216,658	3/4	3/4	3/4
7	175,346	7	197,951	7	209,230	7	216,739	7	7	7
1/4	175,581	1/4	198,186	1/4	209,463	1/4	216,820	1/4	1/4	1/4
1/2	175,817	1/2	198,422	1/2	209,696	1/2	216,901	1/2	1/2	1/2
3/4	176,053	3/4	198,657	3/4	209,929	3/4	216,982	3/4	3/4	3/4
8	176,289	8	198,892	8	210,162	8	217,063	8	8	8
1/4	176,525	1/4	199,127	1/4	210,395	1/4	217,144	1/4	1/4	1/4
1/2	176,761	1/2	199,362	1/2	210,628	1/2	217,225	1/2	1/2	1/2
3/4	176,997	3/4	199,597	3/4	210,861	3/4	217,306	3/4	3/4	3/4
9	177,232	9	199,833	9	211,094	9	217,387	9	9	9
1/4	177,468	1/4	200,068	1/4	211,326	1/4	217,468	1/4	1/4	1/4
1/2	177,704	1/2	200,303	1/2	211,559	1/2	217,549	1/2	1/2	1/2
3/4	177,940	3/4	200,538	3/4	211,792	3/4	217,630	3/4	3/4	3/4
10	178,176	10	200,773	10	212,025	10	217,711	10	10	10
1/4	178,412	1/4	201,008	1/4	212,258	1/4	217,792	1/4	1/4	1/4
1/2	178,647	1/2	201,244	1/2	212,491	1/2	217,873	1/2	1/2	1/2
3/4	178,883	3/4	201,479	3/4	212,724	3/4	217,954	3/4	3/4	3/4
11	179,119	11	201,714	11	212,957	11	218,035	11	11	11
1/4	179,355	1/4	201,949	1/4	213,184	1/4	218,116	1/4	1/4	1/4
1/2	179,591	1/2	202,184	1/2	213,410	1/2	218,197	1/2	1/2	1/2
3/4	179,827	3/4	202,419	3/4	213,637	3/4	218,278	3/4	3/4	3/4

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Tom J. Hume



CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-05 3/4"

IN	0 FT.	1 FT.	2 FT.	3 FT.	4 FT.	5 FT.	6 FT.	7 FT.	8 FT.	9 FT.
0	972	0	17,707	0	51,694	0	68,704	0	102,722	0
1/4	1,267	18,061	35,049	52,048	69,068	86,067	103,076	120,082	137,072	154,063
1/2	1,562	18,415	35,402	52,402	69,413	86,422	103,431	120,436	137,442	154,447
3/4	1,858	18,770	35,755	52,757	69,767	86,776	103,785	120,790	137,780	154,771
1	2,153	19,124	36,109	53,111	70,121	87,130	104,139	121,144	138,134	155,125
1/4	2,502	19,478	36,462	53,465	70,476	87,485	104,494	121,498	138,488	155,479
1/2	2,852	19,833	36,816	53,820	70,830	87,839	104,848	121,852	138,842	155,833
3/4	3,202	20,187	37,169	54,174	71,185	88,194	105,202	122,206	139,196	156,187
2	3,551	20,542	37,523	54,529	71,539	88,548	105,557	122,559	139,550	156,541
1/4	3,903	20,896	37,877	54,883	71,893	88,902	105,911	122,913	139,904	156,895
1/2	4,255	21,250	38,230	55,237	72,248	89,257	106,265	123,267	140,258	157,248
3/4	4,606	21,605	38,584	55,592	72,602	89,611	106,620	123,621	140,612	157,602
3	4,958	21,959	38,938	55,946	72,956	89,965	106,974	123,975	140,966	157,956
1/4	5,311	22,313	39,292	56,301	73,311	90,320	107,328	124,329	141,320	158,310
1/2	5,664	22,668	39,646	56,655	73,665	90,674	107,683	124,683	141,674	158,664
3/4	6,017	23,022	39,999	57,009	74,019	91,028	108,037	125,037	142,028	159,018
4	6,370	23,377	40,353	57,364	74,374	91,383	108,392	125,391	142,382	159,372
1/4	6,724	23,731	40,708	57,718	74,728	91,737	108,746	125,745	142,736	159,726
1/2	7,078	24,085	41,062	58,072	75,083	92,091	109,100	126,099	143,090	160,080
3/4	7,431	24,440	41,416	58,427	75,437	92,446	109,455	126,453	143,444	160,434
5	7,785	24,794	41,771	58,781	75,791	92,800	109,809	126,807	143,798	160,788
1/4	8,139	25,148	42,125	59,136	76,146	93,154	110,163	127,161	144,152	161,142
1/2	8,493	25,503	42,480	59,490	76,500	93,509	110,518	127,515	144,506	161,496
3/4	8,848	25,857	42,834	59,844	76,854	93,863	110,872	127,869	144,860	161,850
6	9,202	26,212	43,188	60,199	77,209	94,217	111,226	128,223	145,214	162,204
1/4	9,556	26,565	43,543	60,553	77,563	94,572	111,581	128,577	145,567	162,558
1/2	9,910	26,918	43,897	60,907	77,917	94,926	111,935	128,931	145,921	162,912
3/4	10,265	27,272	44,251	61,262	78,272	95,281	112,289	129,285	146,275	163,266
7	10,619	27,625	44,606	61,616	78,626	95,635	112,644	129,639	146,629	163,620
1/4	10,973	27,979	44,960	61,971	78,980	95,989	112,998	129,993	146,983	163,974
1/2	11,328	28,332	45,315	62,325	79,335	96,344	113,352	130,347	147,337	164,328
3/4	11,682	28,686	45,669	62,679	79,689	96,698	113,707	130,701	147,691	164,682
8	12,037	29,039	46,023	63,034	80,043	97,052	114,061	131,055	148,045	165,036
1/4	12,391	29,393	46,378	63,388	80,398	97,407	114,416	131,409	148,399	165,390
1/2	12,745	29,746	46,732	63,743	80,752	97,761	114,770	131,763	148,753	165,744
3/4	13,100	30,100	47,087	64,097	81,106	98,115	115,124	132,117	149,107	166,098
9	13,454	30,453	47,441	64,451	81,461	98,470	115,479	132,471	149,461	166,452
1/4	13,808	30,807	47,795	64,806	81,815	98,824	115,833	132,825	149,815	166,806
1/2	14,163	31,160	48,150	65,160	82,170	99,178	116,187	133,179	150,169	167,160
3/4	14,517	31,514	48,504	65,514	82,524	99,533	116,542	133,533	150,523	167,514
10	14,872	31,867	48,858	65,869	82,878	99,887	116,896	133,887	150,877	167,868
1/4	15,226	32,221	49,213	66,223	83,233	100,241	117,250	134,240	151,231	168,103
1/2	15,580	32,574	49,567	66,578	83,587	100,596	117,604	134,594	151,585	168,339
3/4	15,935	32,928	49,922	66,932	83,941	100,950	117,958	134,948	151,939	168,575
11	16,289	33,281	50,276	67,286	84,296	101,305	118,312	135,302	152,293	168,811
1/4	16,643	33,635	50,630	67,641	84,650	101,659	118,666	135,656	152,647	169,047
1/2	16,998	33,988	50,985	67,995	85,004	102,013	119,020	136,010	153,001	169,283
3/4	17,352	34,342	51,339	68,350	85,359	102,368	119,374	136,364	153,355	169,518

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP LIP OF 2" "HERMETIC" VALVE
GAUGE POINT: (HERMETIC) LOCATED 12'-09" OFF CENTERLINE AND 55'-06" FORWARD OF AFT BULKHEAD.

PRECISION MEASUREMENT
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P.O. Box 2092
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The J. J. Jones



PRECISION MEASUREMENT & ANALYSIS, INC.

PRECISION MEASUREMENT & ANALYSIS, INC.

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

GAUGE HEIGHT 15'-05 3/4"

	10 FT.	11 FT.	12 FT.	13 FT.	14 FT.	15 FT.	16 FT.	17 FT.	18 FT.	19 FT.
0	169,754	0	181,074	0	203,665	0	214,873	0	0	0
1/4	169,990	1/4	181,310	1/4	203,900	1/4	215,055	1/4	1/4	1/4
1/2	170,226	1/2	181,546	1/2	204,135	1/2	215,238	1/2	1/2	1/2
3/4	170,462	3/4	181,782	3/4	204,370	3/4	215,420	3/4	3/4	3/4
1	170,698	1	182,018	1	204,606	1	215,602	1	1	1
1/4	170,933	1/4	182,253	1/4	204,841	1/4	215,734	1/4	1/4	1/4
1/2	171,169	1/2	182,489	1/2	205,076	1/2	215,865	1/2	1/2	1/2
3/4	171,405	3/4	182,725	3/4	205,311	3/4	215,997	3/4	3/4	3/4
2	171,641	2	182,961	2	205,546	2	216,129	2	2	2
1/4	171,877	1/4	183,197	1/4	205,781	1/4	216,210	1/4	1/4	1/4
1/2	172,113	1/2	183,433	1/2	206,016	1/2	216,291	1/2	1/2	1/2
3/4	172,348	3/4	183,668	3/4	206,252	3/4	216,372	3/4	3/4	3/4
3	172,584	3	183,904	3	206,487	3	216,453	3	3	3
1/4	172,820	1/4	184,140	1/4	206,722	1/4	216,534	1/4	1/4	1/4
1/2	173,056	1/2	184,376	1/2	206,957	1/2	216,615	1/2	1/2	1/2
3/4	173,292	3/4	184,612	3/4	207,192	3/4	216,696	3/4	3/4	3/4
4	173,528	4	184,848	4	207,427	4	216,777	4	4	4
1/4	173,763	1/4	185,083	1/4	207,663	1/4	216,858	1/4	1/4	1/4
1/2	173,999	1/2	185,319	1/2	207,898	1/2	216,939	1/2	1/2	1/2
3/4	174,235	3/4	185,555	3/4	208,133	3/4	217,020	3/4	3/4	3/4
5	174,471	5	185,791	5	208,368	5	217,101	5	5	5
1/4	174,707	1/4	186,027	1/4	208,603	1/4	217,182	1/4	1/4	1/4
1/2	174,943	1/2	186,263	1/2	208,838	1/2	217,263	1/2	1/2	1/2
3/4	175,178	3/4	186,498	3/4	209,073	3/4	217,344	3/4	3/4	3/4
6	175,414	6	186,734	6	209,309	6	217,425	6	6	6
1/4	175,650	1/4	186,969	1/4	209,544	1/4	217,506	1/4	1/4	1/4
1/2	175,886	1/2	187,205	1/2	209,779	1/2	217,587	1/2	1/2	1/2
3/4	176,122	3/4	187,440	3/4	210,014	3/4	217,668	3/4	3/4	3/4
7	176,358	7	187,675	7	210,250	7	217,749	7	7	7
1/4	176,593	1/4	187,910	1/4	210,485	1/4	217,830	1/4	1/4	1/4
1/2	176,829	1/2	188,145	1/2	210,720	1/2	217,911	1/2	1/2	1/2
3/4	177,065	3/4	188,380	3/4	210,955	3/4	217,992	3/4	3/4	3/4
8	177,301	8	188,615	8	211,190	8	218,073	8	8	8
1/4	177,537	1/4	188,851	1/4	211,425	1/4	218,154	1/4	1/4	1/4
1/2	177,773	1/2	189,086	1/2	211,660	1/2	218,235	1/2	1/2	1/2
3/4	178,008	3/4	189,321	3/4	211,895	3/4	218,316	3/4	3/4	3/4
9	178,244	9	189,556	9	212,130	9	218,397	9	9	9
1/4	178,480	1/4	189,791	1/4	212,365	1/4	218,478	1/4	1/4	1/4
1/2	178,716	1/2	190,026	1/2	212,600	1/2	218,559	1/2	1/2	1/2
3/4	178,952	3/4	190,262	3/4	212,835	3/4	218,640	3/4	3/4	3/4
10	179,188	10	190,497	10	213,070	10	218,721	10	10	10
1/4	179,423	1/4	190,732	1/4	213,305	1/4	218,802	1/4	1/4	1/4
1/2	179,659	1/2	190,967	1/2	213,540	1/2	218,883	1/2	1/2	1/2
3/4	179,895	3/4	191,202	3/4	213,775	3/4	218,964	3/4	3/4	3/4
11	180,131	11	191,437	11	214,010	11	219,045	11	11	11
1/4	180,367	1/4	191,672	1/4	214,245	1/4	219,126	1/4	1/4	1/4
1/2	180,603	1/2	191,907	1/2	214,480	1/2	219,207	1/2	1/2	1/2
3/4	180,838	3/4	192,143	3/4	214,715	3/4	219,288	3/4	3/4	3/4

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/05/2015 SW
CALCULATED: 03/05/2015 CL
PRINTED: 03/05/2015 CL
CANCELS AND SUPERCEDES
ALL PRIOR TO 03/2015

PRECISION MEASUREMENT
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Paul J. Mac



BARGE HFL 431

FUEL TANK
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	0	0	109	0	278	0	444	0	610	0	776	0	942	0	1108	0	1274	0	1440
1/4	1	1/4	112	1/4	281	1/4	448	1/4	614	1/4	780	1/4	946	1/4	1112	1/4	1278	1/4	1444
1/2	1	1/2	115	1/2	285	1/2	451	1/2	617	1/2	783	1/2	949	1/2	1115	1/2	1281	1/2	1447
3/4	2	3/4	119	3/4	289	3/4	454	3/4	621	3/4	787	3/4	953	3/4	1119	3/4	1285	3/4	1451
1	3	1	122	1	292	1	457	1	624	1	790	1	956	1	1122	1	1288	1	1454
1/4	4	1/4	125	1/4	296	1/4	460	1/4	627	1/4	793	1/4	959	1/4	1125	1/4	1291	1/4	1457
1/2	5	1/2	128	1/2	300	1/2	463	1/2	630	1/2	796	1/2	962	1/2	1128	1/2	1294	1/2	1460
3/4	7	3/4	132	3/4	303	3/4	465	3/4	633	3/4	799	3/4	965	3/4	1131	3/4	1297	3/4	1463
2	8	2	135	2	307	2	468	2	636	2	802	2	968	2	1134	2	1300	2	1466
1/4	10	1/4	138	1/4	311	1/4	471	1/4	639	1/4	805	1/4	971	1/4	1137	1/4	1303	1/4	1469
1/2	11	1/2	142	1/2	314	1/2	474	1/2	642	1/2	808	1/2	974	1/2	1140	1/2	1306	1/2	1472
3/4	13	3/4	145	3/4	318	3/4	477	3/4	645	3/4	811	3/4	977	3/4	1143	3/4	1309	3/4	1475
3	15	3	149	3	321	3	480	3	648	3	814	3	980	3	1146	3	1312	3	1478
1/4	16	1/4	152	1/4	325	1/4	482	1/4	651	1/4	817	1/4	983	1/4	1149	1/4	1315	1/4	1481
1/2	18	1/2	156	1/2	329	1/2	485	1/2	654	1/2	820	1/2	986	1/2	1152	1/2	1318	1/2	1484
3/4	20	3/4	159	3/4	332	3/4	488	3/4	657	3/4	823	3/4	989	3/4	1155	3/4	1321	3/4	1487
4	22	4	162	4	336	4	490	4	660	4	826	4	992	4	1158	4	1324	4	1490
1/4	24	1/4	166	1/4	339	1/4	493	1/4	663	1/4	829	1/4	995	1/4	1161	1/4	1327	1/4	1493
1/2	27	1/2	169	1/2	343	1/2	495	1/2	666	1/2	832	1/2	998	1/2	1164	1/2	1330	1/2	1496
3/4	29	3/4	173	3/4	347	3/4	498	3/4	669	3/4	835	3/4	1001	3/4	1167	3/4	1333	3/4	1499
5	31	5	176	5	350	5	501	5	672	5	838	5	1004	5	1170	5	1336	5	1502
1/4	33	1/4	180	1/4	354	1/4	503	1/4	675	1/4	841	1/4	1007	1/4	1173	1/4	1339	1/4	1505
1/2	36	1/2	183	1/2	357	1/2	505	1/2	678	1/2	844	1/2	1010	1/2	1176	1/2	1342	1/2	1508
3/4	38	3/4	187	3/4	361	3/4	508	3/4	681	3/4	847	3/4	1013	3/4	1179	3/4	1345	3/4	1511
6	40	6	191	6	364	6	510	6	684	6	850	6	1016	6	1182	6	1348	6	1514
1/4	43	1/4	194	1/4	368	1/4	512	1/4	687	1/4	853	1/4	1019	1/4	1185	1/4	1351	1/4	1517
1/2	45	1/2	198	1/2	371	1/2	514	1/2	690	1/2	856	1/2	1022	1/2	1188	1/2	1354	1/2	1520
3/4	48	3/4	201	3/4	375	3/4	516	3/4	693	3/4	859	3/4	1025	3/4	1191	3/4	1357	3/4	1523
7	50	7	205	7	378	7	519	7	696	7	862	7	1028	7	1194	7	1360	7	1526
1/4	53	1/4	208	1/4	382	1/4	520	1/4	699	1/4	865	1/4	1031	1/4	1197	1/4	1363	1/4	1529
1/2	56	1/2	212	1/2	385	1/2	522	1/2	702	1/2	868	1/2	1034	1/2	1200	1/2	1366	1/2	1532
3/4	58	3/4	216	3/4	389	3/4	524	3/4	705	3/4	871	3/4	1037	3/4	1203	3/4	1369	3/4	1535
8	61	8	219	8	392	8	526	8	708	8	874	8	1040	8	1206	8	1372	8	1538
1/4	64	1/4	223	1/4	396	1/4	528	1/4	711	1/4	877	1/4	1043	1/4	1209	1/4	1375	1/4	1541
1/2	67	1/2	227	1/2	399	1/2	530	1/2	714	1/2	880	1/2	1046	1/2	1212	1/2	1378	1/2	1544
3/4	70	3/4	230	3/4	402	3/4	531	3/4	717	3/4	883	3/4	1049	3/4	1215	3/4	1381	3/4	1547
9	72	9	234	9	406	9	533	9	720	9	886	9	1052	9	1218	9	1384	9	1550
1/4	75	1/4	237	1/4	409	1/4	534	1/4	723	1/4	889	1/4	1055	1/4	1221	1/4	1387	1/4	1553
1/2	78	1/2	241	1/2	412	1/2	535	1/2	726	1/2	892	1/2	1058	1/2	1224	1/2	1390	1/2	1556
3/4	81	3/4	245	3/4	416	3/4	537	3/4	729	3/4	895	3/4	1061	3/4	1227	3/4	1393	3/4	1559
10	84	10	248	10	419	10	538	10	732	10	898	10	1064	10	1230	10	1396	10	1562
1/4	87	1/4	252	1/4	422	1/4	539	1/4	735	1/4	901	1/4	1067	1/4	1233	1/4	1399	1/4	1565
1/2	90	1/2	256	1/2	425	1/2	539	1/2	738	1/2	904	1/2	1070	1/2	1236	1/2	1402	1/2	1568
3/4	93	3/4	259	3/4	429	3/4	540	3/4	741	3/4	907	3/4	1073	3/4	1239	3/4	1405	3/4	1571
11	96	11	263	11	432	11	541	11	744	11	910	11	1076	11	1242	11	1408	11	1574
1/4	99	1/4	267	1/4	435	1/4	541	1/4	747	1/4	913	1/4	1079	1/4	1245	1/4	1411	1/4	1577
1/2	103	1/2	270	1/2	438	1/2	541	1/2	750	1/2	916	1/2	1082	1/2	1248	1/2	1414	1/2	1580
3/4	106	3/4	274	3/4	441	3/4	541	3/4	753	3/4	919	3/4	1085	3/4	1251	3/4	1417	3/4	1583

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO 2" DIAMETER PIPE.

STRAPPED: 03/05/2015 SW

CALCULATED: 03/05/2015 CL

PRINTED: 03/05/2015 CL

CANCELS AND SUPERCEDES

ALL PRIOR TO 03/2015

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

PRECISION MEASUREMENT
& ANALYSIS, INC.

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BARGE HFL 431

FOR 5000
INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT	IN	OUT
0	94	0	4,599	0	9,104	0	13,609	0	18,113	0		0		0		0		0	
1/4	188	1/4	4,693	1/4	9,198	1/4	13,703	1/4	18,205	1/4		1/4		1/4		1/4		1/4	
1/2	282	1/2	4,787	1/2	9,292	1/2	13,797	1/2	18,298	1/2		1/2		1/2		1/2		1/2	
3/4	375	3/4	4,881	3/4	9,386	3/4	13,891	3/4	18,390	3/4		3/4		3/4		3/4		3/4	
1	469	1	4,974	1	9,480	1	13,985	1	18,483	1		1		1		1		1	
1/4	563	1/4	5,068	1/4	9,573	1/4	14,078	1/4	18,575	1/4		1/4		1/4		1/4		1/4	
1/2	657	1/2	5,162	1/2	9,667	1/2	14,172	1/2	18,668	1/2		1/2		1/2		1/2		1/2	
3/4	751	3/4	5,256	3/4	9,761	3/4	14,266	3/4	18,760	3/4		3/4		3/4		3/4		3/4	
2	845	2	5,350	2	9,855	2	14,360	2	18,852	2		2		2		2		2	
1/4	939	1/4	5,444	1/4	9,949	1/4	14,454	1/4	18,945	1/4		1/4		1/4		1/4		1/4	
1/2	1,032	1/2	5,538	1/2	10,043	1/2	14,548	1/2	19,037	1/2		1/2		1/2		1/2		1/2	
3/4	1,126	3/4	5,631	3/4	10,137	3/4	14,642	3/4	19,130	3/4		3/4		3/4		3/4		3/4	
3	1,220	3	5,725	3	10,230	3	14,735	3	19,222	3		3		3		3		3	
1/4	1,314	1/4	5,819	1/4	10,324	1/4	14,829	1/4	19,315	1/4		1/4		1/4		1/4		1/4	
1/2	1,408	1/2	5,913	1/2	10,418	1/2	14,923	1/2	19,407	1/2		1/2		1/2		1/2		1/2	
3/4	1,502	3/4	6,007	3/4	10,512	3/4	15,017	3/4	19,500	3/4		3/4		3/4		3/4		3/4	
4	1,596	4	6,101	4	10,606	4	15,111	4	19,592	4		4		4		4		4	
1/4	1,689	1/4	6,195	1/4	10,700	1/4	15,205	1/4	19,684	1/4		1/4		1/4		1/4		1/4	
1/2	1,783	1/2	6,288	1/2	10,794	1/2	15,299	1/2	19,777	1/2		1/2		1/2		1/2		1/2	
3/4	1,877	3/4	6,382	3/4	10,887	3/4	15,392	3/4	19,869	3/4		3/4		3/4		3/4		3/4	
5	1,971	5	6,476	5	10,981	5	15,486	5	19,962	5		5		5		5		5	
1/4	2,065	1/4	6,570	1/4	11,075	1/4	15,580	1/4	20,054	1/4		1/4		1/4		1/4		1/4	
1/2	2,159	1/2	6,664	1/2	11,169	1/2	15,674	1/2	20,147	1/2		1/2		1/2		1/2		1/2	
3/4	2,253	3/4	6,758	3/4	11,263	3/4	15,768	3/4	20,239	3/4		3/4		3/4		3/4		3/4	
6	2,346	6	6,852	6	11,357	6	15,862	6	20,333	6		6		6		6		6	
1/4	2,440	1/4	6,945	1/4	11,451	1/4	15,956	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	2,534	1/2	7,039	1/2	11,544	1/2	16,049	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	2,628	3/4	7,133	3/4	11,638	3/4	16,143	3/4		3/4		3/4		3/4		3/4		3/4	
7	2,722	7	7,227	7	11,732	7	16,237	7		7		7		7		7		7	
1/4	2,816	1/4	7,321	1/4	11,826	1/4	16,331	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	2,910	1/2	7,415	1/2	11,920	1/2	16,425	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,003	3/4	7,509	3/4	12,014	3/4	16,519	3/4		3/4		3/4		3/4		3/4		3/4	
8	3,097	8	7,602	8	12,107	8	16,613	8		8		8		8		8		8	
1/4	3,191	1/4	7,696	1/4	12,201	1/4	16,706	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,285	1/2	7,790	1/2	12,295	1/2	16,800	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,379	3/4	7,884	3/4	12,389	3/4	16,894	3/4		3/4		3/4		3/4		3/4		3/4	
9	3,473	9	7,978	9	12,483	9	16,988	9		9		9		9		9		9	
1/4	3,567	1/4	8,072	1/4	12,577	1/4	17,082	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	3,660	1/2	8,166	1/2	12,671	1/2	17,176	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	3,754	3/4	8,259	3/4	12,765	3/4	17,270	3/4		3/4		3/4		3/4		3/4		3/4	
10	3,848	10	8,353	10	12,858	10	17,363	10		10		10		10		10		10	
1/4	3,942	1/4	8,447	1/4	12,952	1/4	17,457	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,036	1/2	8,541	1/2	13,046	1/2	17,551	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,130	3/4	8,635	3/4	13,140	3/4	17,645	3/4		3/4		3/4		3/4		3/4		3/4	
11	4,224	11	8,729	11	13,234	11	17,739	11		11		11		11		11		11	
1/4	4,317	1/4	8,823	1/4	13,328	1/4	17,833	1/4		1/4		1/4		1/4		1/4		1/4	
1/2	4,411	1/2	8,916	1/2	13,421	1/2	17,927	1/2		1/2		1/2		1/2		1/2		1/2	
3/4	4,505	3/4	9,010	3/4	13,515	3/4	18,020	3/4		3/4		3/4		3/4		3/4		3/4	

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

STRAPPED: 03/05/2015 SW
CALCULATED: 03/05/2015 CL
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CANCELS AND SUPERCEDES
ALL PRIOR TO 03/2015

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPWS CHAPTER 2.7.

CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.

CAPACITY TABLE ONLY APPLIES TO EXTREME HEIGHT OF TANK.

CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

PRECISION MEASUREMENT
& ANALYSIS, INC.
P.O. Box 2092
Pearland, Texas 77588
<http://www.pmacorp.net>



BARREL HFL 431

INNAGE TABLE

CAPACITIES GIVEN IN WHOLE GALLONS

		0 FT.		1 FT.		2 FT.		3 FT.		4 FT.		5 FT.		6 FT.		7 FT.		8 FT.		9 FT.	
N		IN		IN		IN		IN		IN		IN		IN		IN		IN		IN	
0		94	0	4,599	0	9,104	0	13,609	0	18,113	0										
1/4		188	1/4	4,693	1/4	9,198	1/4	13,703	1/4	18,208	1/4										
1/2		282	1/2	4,787	1/2	9,292	1/2	13,797	1/2	18,298	1/2										
3/4		375	3/4	4,881	3/4	9,386	3/4	13,891	3/4	18,390	3/4										
1		469	1	4,974	1	9,480	1	13,985	1	18,483	1										
1/4		563	1/4	5,068	1/4	9,573	1/4	14,078	1/4	18,575	1/4										
1/2		657	1/2	5,162	1/2	9,667	1/2	14,172	1/2	18,668	1/2										
3/4		751	3/4	5,256	3/4	9,761	3/4	14,266	3/4	18,760	3/4										
2		845	2	5,350	2	9,855	2	14,360	2	18,852	2										
1/4		939	1/4	5,444	1/4	9,949	1/4	14,454	1/4	18,945	1/4										
1/2		1,032	1/2	5,538	1/2	10,043	1/2	14,548	1/2	19,037	1/2										
3/4		1,126	3/4	5,631	3/4	10,137	3/4	14,642	3/4	19,130	3/4										
3		1,220	3	5,725	3	10,230	3	14,735	3	19,222	3										
1/4		1,314	1/4	5,819	1/4	10,324	1/4	14,829	1/4	19,315	1/4										
1/2		1,408	1/2	5,913	1/2	10,418	1/2	14,923	1/2	19,407	1/2										
3/4		1,502	3/4	6,007	3/4	10,512	3/4	15,017	3/4	19,500	3/4										
4		1,596	4	6,101	4	10,606	4	15,111	4	19,592	4										
1/4		1,689	1/4	6,195	1/4	10,700	1/4	15,205	1/4	19,684	1/4										
1/2		1,783	1/2	6,288	1/2	10,794	1/2	15,299	1/2	19,777	1/2										
3/4		1,877	3/4	6,382	3/4	10,887	3/4	15,392	3/4	19,869	3/4										
5		1,971	5	6,476	5	10,981	5	15,486	5	19,962	5										
1/4		2,065	1/4	6,570	1/4	11,075	1/4	15,580	1/4	20,054	1/4										
1/2		2,159	1/2	6,664	1/2	11,169	1/2	15,674	1/2	20,147	1/2										
3/4		2,253	3/4	6,758	3/4	11,263	3/4	15,768	3/4	20,239	3/4										
6		2,346	6	6,852	6	11,357	6	15,862	6	20,333	6										
1/4		2,440	1/4	6,945	1/4	11,451	1/4	15,956	1/4												
1/2		2,534	1/2	7,039	1/2	11,544	1/2	16,049	1/2												
3/4		2,628	3/4	7,133	3/4	11,638	3/4	16,143	3/4												
7		2,722	7	7,227	7	11,732	7	16,237	7												
1/4		2,816	1/4	7,321	1/4	11,826	1/4	16,331	1/4												
1/2		2,910	1/2	7,415	1/2	11,920	1/2	16,425	1/2												
3/4		3,003	3/4	7,509	3/4	12,014	3/4	16,519	3/4												
8		3,097	8	7,602	8	12,107	8	16,613	8												
1/4		3,191	1/4	7,696	1/4	12,201	1/4	16,706	1/4												
1/2		3,285	1/2	7,790	1/2	12,295	1/2	16,800	1/2												
3/4		3,379	3/4	7,884	3/4	12,389	3/4	16,894	3/4												
9		3,473	9	7,978	9	12,483	9	16,988	9												
1/4		3,567	1/4	8,072	1/4	12,577	1/4	17,082	1/4												
1/2		3,660	1/2	8,166	1/2	12,671	1/2	17,176	1/2												
3/4		3,754	3/4	8,259	3/4	12,764	3/4	17,270	3/4												
10		3,848	10	8,353	10	12,858	10	17,363	10												
1/4		3,942	1/4	8,447	1/4	12,952	1/4	17,457	1/4												
1/2		4,036	1/2	8,541	1/2	13,046	1/2	17,551	1/2												
3/4		4,130	3/4	8,635	3/4	13,140	3/4	17,645	3/4												
11		4,224	11	8,729	11	13,234	11	17,739	11												
1/4		4,317	1/4	8,823	1/4	13,328	1/4	17,833	1/4												
1/2		4,411	1/2	8,916	1/2	13,421	1/2	17,927	1/2												
3/4		4,505	3/4	9,010	3/4	13,515	3/4	18,020	3/4												

CERTIFIED CHART FOR THE ABOVE NAMED TANK ONLY.

BARGE STRAPPED AND COMPUTED IN ACCORDANCE WITH MPMS CHAPTER 2.7.
CAPACITY TABLE ONLY APPLIES WHEN BARGE IS ON EVEN KEEL.
CAPACITY TABLE EXTENDS TO EXTREME HEIGHT OF TANK.
CAPACITY TABLE ONLY APPLIES TO INNAGE GAUGES TAKEN TO TOP OF 2" HERMETIC VALVE.

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